

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions of claims in the application.

1. (Previously presented) A conditioning disk comprising a substrate, a plurality of abrasive particles, and a carrier, wherein:
 - said substrate has top and bottom surfaces;
 - said plurality of abrasive particles is arranged on at least a portion of said top substrate surface, said abrasive particles being affixed to said substrate with a matrix material, said matrix material comprising a brazing alloy and a corrosion resistant powder selected from at least one of stainless steel, nickel, nichrome, titanium, zirconium, tungsten carbide, silicon carbide, wherein said corrosion resistant powder comprises from 40% to 98% by weight of said matrix material; and
 - said carrier is affixed to said bottom substrate surface, wherein said carrier comprises at least one of synthetic plastic or ceramic.
2. (Original) The conditioning disk of claim 1 wherein said abrasive particles comprise at least one of aluminum oxide, cubic boron nitride, or diamond.
3. (Original) The conditioning disk of claim 1 wherein said matrix material comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.
4. (Previously presented) The conditioning disk of claim 1, wherein said corrosion resistant powder is sintered.
5. (Original) The conditioning disk of claim 1 wherein said substrate is formed of said matrix material.
6. (Original) The conditioning disk of claim 1 wherein said substrate is more flexible than said carrier.

7. (Original) The conditioning disk of claim 1 wherein said carrier is affixed to said substrate with an adhesive.

8. (Original) The conditioning disk of claim 1 wherein said abrasive particles are arranged in a predetermined pattern.

9. (Previously presented) The conditioning disk of claim 1 wherein said brazing alloy comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

10. (Original) The conditioning disk of claim 9 wherein said abrasive particles are diamond and said brazing alloy comprises at least one of chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

11. (Original) The conditioning disk of claim 9 wherein said abrasive particles are cubic boron nitride and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

12. (Original) The conditioning disk of claim 9 wherein said abrasive particles are aluminum oxide and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

13. (Withdrawn – Previously presented) A conditioning disk comprising:
a substrate having top and bottom surfaces;
a plurality of abrasive particles arranged on at least a portion of said top substrate surface, said abrasive particles affixed to said substrate with a matrix material, said matrix material comprising a brazing alloy and a corrosion resistant powder selected from at least one of stainless steel, nickel, nichrome, titanium, zirconium, tungsten carbide, silicon carbide, wherein said corrosion resistant powder comprises from 40% to 98% by weight of said matrix material; and
a polycarbonate carrier affixed to said bottom substrate surface.

14. (Withdrawn) The conditioning disk of claim 13 wherein said abrasive particles comprise at least one of aluminum oxide, cubic boron nitride, or diamond.

15. (Withdrawn) The conditioning disk of claim 13 wherein said matrix material comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

16. (Withdrawn – Previously presented) The conditioning disk of claim 13 wherein said corrosion resistant powder is sintered.

17. (Withdrawn) The conditioning disk of claim 13 wherein said carrier is affixed to said substrate with an adhesive.

18. (Withdrawn) The conditioning disk of claim 13 wherein said abrasive particles are arranged in a predetermined pattern.

19. (Withdrawn – Previously presented) The conditioning disk of claim 13 wherein said a brazing alloy comprises at least one of aluminum, boron, carbon, chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

20. (Withdrawn) The conditioning disk of claim 19 wherein said abrasive particles are diamond and said brazing alloy comprises at least one of chromium, tungsten, cobalt, titanium, zinc, iron, manganese, or silicon.

21. (Withdrawn) The conditioning disk of claim 19 wherein said abrasive particles are cubic boron nitride and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

22. (Withdrawn) The conditioning disk of claim 19 wherein said abrasive particles are aluminum oxide and said brazing alloy comprises at least one of aluminum, boron, carbon, or silicon.

23. (Currently amended) A conditioning disk comprising a substrate, a plurality of abrasive particles, and a carrier, wherein:

said substrate has top and bottom surfaces;

said plurality of abrasive particles is arranged on at least a portion of said top substrate surface, said abrasive particles being affixed to said substrate by chemical bonding with a brazing alloy including at least one of aluminum, boron, carbon, cobalt, iron, manganese, silicon, and zinc ~~an electroplated metal~~; and

said carrier ~~contacts the entire bottom substrate surface and~~ is affixed to said bottom substrate surface ~~by at least one of an adhesive or mechanical fasteners~~, wherein said carrier comprises at least one of synthetic plastic or ceramic.

24. (Withdrawn) The conditioning disk of claim 23 wherein said carrier comprises polycarbonate.

25. (Original) The conditioning disk of claim 23 wherein said abrasive particles comprise at least one of aluminum oxide, cubic boron nitride, or diamond.

26. (Currently amended) The conditioning disk of claim 23 wherein said brazing alloy ~~electroplated metal comprises~~ includes at least one of cobalt, iron, manganese, silicon or zinc ~~nickel~~.

27. (Original) The conditioning disk of claim 26 wherein said abrasive particles are diamond.

28. (Currently amended) The conditioning disk of claim 23 wherein said substrate is formed of ~~said electroplated~~ metal.

29. (Original) The conditioning disk of claim 23 wherein said carrier is affixed to said substrate with an adhesive.

30. (Original) The conditioning disk of claim 23 wherein said abrasive particles are arranged in a predetermined pattern.

31. (Currently amended) A conditioning disk comprising a substrate, a plurality of abrasive particles, and a carrier, wherein:

said substrate has top and bottom surfaces;

said plurality of abrasive particles is arranged on at least a portion of said top substrate surface, said abrasive particles being affixed to said substrate by chemical bonding with a matrix material comprising an inter-metallic compound of a brazing alloy and a sintered corrosion resistant powder selected from at least one of stainless steel, nickel, nichrome, titanium, zirconium, tungsten carbide, and silicon carbide, wherein said sintered corrosion resistant powder comprises from 40% to 98% by weight of said matrix material; and

said carrier ~~is permanently~~ affixed to said bottom substrate surface by at least one of an adhesive or mechanical fasteners, wherein said carrier comprises at least one of synthetic plastic or ceramic.

32. (Currently amended) The conditioning disk of claim 31~~2~~, wherein said carrier is affixed to said bottom surface by mechanical fasteners.